

MORE BUTTERFLIES OF THE KHASI AND JAINTIA  
HILLS, ASSAM

BY

SIR KEITH CANTLIE, I.C.S. (Retd.)

This article continues that by Mr. Parsons and myself in Vol. 47 (3) April, 1947. It contains additions to that list, a number being due to Mr. R. Neuhaus who collected in 1948-49, and then deals with the Lycaenidae. Although Lycaenids were taken around the old hill station of Cherrapoonji in Cherra State and sent to museums, the first large collection was made by the Rev. W. A. Hamilton, Chaplain of Shillong, employing many Khasi catchers in Cherra State. He sent it to de Niceville who used it for the publication in 1889 of Vol. 3 of his 'Butterflies of India'. Swinhoe got all families from the same catchers and printed a general list for the Khasi Hills, in *Trans. Ent. Soc.*, 1893. He continued to receive from them and a much larger list of Lycaenids can be compiled from his references to the Khasi Hills in his volumes published in 1910 on Lycaenidae in Moore's 'Lepidoptera Indica'. Indeed any present changes from such a list would be due merely to recent changes in nomenclature and differentiation. I collected mildly but did not purchase Lycaenids until 1947 when I asked for their catching through the Shillong dealer, and have examined the takings for the Shillong dealer from then until now. In September 1949 the smashing of my kneecap when collecting in the Naga Hills caused a visit to England in early 1950 for prolonged treatment. By the kindness of the authorities of the British Museum (Natural History), South Kensington, I was able to use the library and examine the collection. The purchase of the fine Lycaenid collection of Mr. C. B. Antram the author of 'Butterflies of India', who was in Cachar from 1910 to 1930 and who got many specimens from the Cherra dealer, the late U. Nissor Singh, increased my stock.

2. The previous article described how the enormous rainfall hinders collection in Cherra State and on the southern slopes of the district down to Sylhet. I have in recent years made visits—a visit means residence in a Khasi village—to Cherra State in early April, when rain may or may not spoil the attempt, and have spent a month in October when rain is moderate. Yet the results were meagre compared with those of professional catchers, even though the rarer species are very few among the quantities taken by them of a few common kinds. Most of these catchers live at Thiedding, down at 1,500 feet in the Uiam river gorge where the hills rise very steeply to over 4,000 feet. Dowki, the best place in the hills for a visitor, *vide* the previous article, has Lycaenids in plenty up to mid-June and again in September, but the hills are all low and the species fewer than in the Thiedding area. The Saipung Forest Reserve in the east of the Jaintia Hills should be the best place in the district being virgin jungle, but it is hard to reach and lacks paths for penetration. On the southern slopes as a whole, cultivation of orange, betel nut, plantain, bay and pan is so extensive that the existence of so many butterflies is surprising.

Mr. St. John Perry of the Assam Civil Service has given me information about certain species in the neighbouring North Cachar Hills, inked with the hill districts in the east of Assam and so with Burma.

3. The northern forests on the low hills along and to the west of the Gauhati-Shillong Road are certainly inferior to those on the southern slopes though rarities occur especially between miles 36 and 41. Now a Reserve, they were formerly under shifting cultivation of cereals. The rainfall is not excessive and my visits have been frequent. Doubtless if professional catchers lived there, species not found by me would be produced.

4. In and around Shillong rarer Lycaenids can be found if one has plenty of leisure, also on the high plateau. The woods at Mawphlong, 17 miles from Shillong, contain some rare species.

5. References are made in the notes to the Upper Assam forests. The term as used here means the forests whether within or without the Naga Hills boundary, lying mostly between the railway and the hills northwards from Lumding to the northern boundary of Sibsagar subdivision. It excludes the Lakhimpur District and Tirap Frontier Tract forests. Dr. Norman of Seleng Tea Estate, P.O. Selenghat, District Sibsagar, has done much collecting of Lycaenids there and observation of their life-history, and has been most generous in sending me species known to exist in the Khasi Hills but which I did not obtain either at all or in sufficient number for study. My own visits to this prolific area have been infrequent.

6. The standard taken for 'Rare' (R) or 'Not Rare' (NR) or 'Very Rare' (VR) is that of a person collecting for himself, but it has been influenced by the takings of Khasi professionals. The class 'Rare' must contain species actually common enough for the 'Not Rare' class.

7. The numbering and nomenclature are those of the second edition of Brigadier Evans's indispensable book. Changes of nomenclature by Corbet have been noted. The Hesperiidae portion of the book has been superseded by Evans's Catalogue of the Hesperiidae of Europe, Asia and Australia, 1947, published and sold by the British Museum (Natural History). Countries are given so that if any species or subspecies occurs in Assam mention of Assam is made. There are many changes in nomenclature and figures of the genitalia of every species.

#### NOT RECORDED IN THE PREVIOUS LIST

##### PAPILIONIDAE

A.3.5. *Chilasa clytia clytia* var. *commixtus* Roth. VR.

One at Dowki and one at Laitera taken by Mr. Neuhaus.

A.4.25. *Papilio polytes romulus*

Female in *romulus* form resembling *hector* taken by Neuhaus at Dowki. The form is rare in Assam but Mr. Antram tells me he got a few.

##### PIERIDAE

B.6.3. *Delias eucharis* Drury. VR.

Mr. Neuhaus showed me a male taken at Dowki. No record known of previous capture here.

B.6.11. *Delias descombesi leucocantha* var. *vasumitra*.

Neuhaus took a female like the figure in Seitz of this Burma form.

B.20.1. *Pareronia (Valeria) avatar avatar* M.

Moore in Lep. Ind. gives Cherra. It may exist on the southern slopes though now extinct in Cherra State. See note in previous list about Gauhati.

## SATYRIDAE

D.2.6. *Mycalesis gautama charaka* M. R.

Two pairs at Umran 2,500 ft. mile 41 G.S. Road, October and November.

D.2.9. *Mycalesis perseus blasius* F. NR.

Overlooked before. WSF May, DSF October, Dowki.

D.2.16. *Mycalesis khasia khasia* Evans. NR.

Talbot has revived Moore's name *intermedia* for this species. NR Sylhet and Assam sides. Evans in *Journal B.N.H.S.* Vol. xxvii (2) of 1920 illustrates male brands and genitalia of this and all species of the genus, based on much original research. The brand under fore in the DSF is smaller than in the WSF and may be confused with that of *mineus*.

D.2.29. *Mycalesis mamerta mamerta* Cr.

Talbot calls it *M. annamitica watsoni* Evans. R. One at Dowki, November. Several along G.S. Road, February, March, April taken by Sanders and Neuhaus.

D.3.37. *Lethe vindhya* Fd. R.

Several at Laitera, 2,500 ft., October.

D.3.47. *Lethe armandii khasiana* M. VR.

First described from here. My only specimen is from the Naga Hills.

D.14.17. *Ypthima similis affectata* El. R.

A speciality of the Khasi Hills, discoverable among one's supposed *baldus*.

D.18. *Ragadia crisilda crito* de N. R.

Several at mile 39 G.S. Road, October.

D.25.6. *Elymnias pealii* WM. VR.

Mr. D. Sanders informs me that he took it about mile 40 G.S. Road in April 1933. I have taken it at Nichuguard, Naga Hills, in May.

## AMATHUSIDAE

*Discophora continentalis continentalis* Stg. R. possibly VR.

One male taken.

NYMPHALIDAE

- F.2.10. *Eriboea eudamippus eudamippus* Db. NR.  
Omitted from the first list by accident. Low levels appears March ; higher levels June.
- F.5. *Dilipa morgiana* Wd. VR.  
One taken by Neuhaus, Dowki, October.
- F.7.6. *Apatura chevana* M. R.  
Sanders took one about mile 40 G.S. Road, over 2,000 ft. in April 1933.
- F.18.9. *Euthalia anosia anosia* M. R.  
Sanders took one at the same place and time as the *chevana*.
- F.18.21. *Euthalia nara nara* M. R.  
Several of both sexes, Shillong, June.
- F.18.29. *Euthalia recta recta* de N. R.  
Swinhoe got many from Cherra. Probably exterminated in that area.
- F.24.2. *Limenitis danava* M. R.  
Occasionally produced from Cherra. Much less rare than *austenia*.
- F.25.7. *Pantoporia kanwa phorkys* Fruh. VR.  
One male Dowki, November.
- F.26.9. *Neptis yerburyi yerburyi* But. R.  
Neuhaus took one in Shillong in July with the discal spot in 2 concave outwardly, markings larger, unsullied. The recorded and usual form here is *sikkima*.
- F.26.14. *Neptis anjana nashona* Swin. R.  
A few from Dowki and Cherra.
- F.26.15. *Neptis ananta ochracea* Evans.  
Several from Cherra, September. One in December above Umran, at 3,000 ft. G.S. Road.
- F.26.24. *Neptis radha radha* M. R.  
Some from here in the British Museum collection. Not so rare in Naga Hills.
- F.26.27. *Neptis heliodore sattanga* M. VR.  
Moore in Lep. Ind. records one male from here.
- (F.26.28. *Neptis paraka* But.  
A possibility, as de Nicéville says one came from Sylhet, which usually means the foot of the Khasi Hills and Antram says, it is common in Cachar.)

F.26.30. *Neptis aurelia* Stg. VR.

Moore in Lep. Ind. records one from here.

F.27.4. *Cyrestis theodamas ganescha* Koll.

Neuhaus took this form at mile 54 G.S. Road. He has taken it in Manipur and at Ledo in N.E. Assam.

F.32. *Rhinopalpa polynice birmana* Fruh. VR.

Moore in Lep. Ind. says he got one from Cherra and there are some from Cherra in the Indian Museum. Occurs in Upper Assam forests.

F.35. *Precis atlites* L.

Should be substituted for the former of the two entries of *iphita* in the previous list.

F.38.5. *Symbrenthia silana* de N. VR.

Taken by Sanders about mile 40 G.S. Road in April 1933.

#### ERYCINIDAE

G.1.4. *Libythea narina rohini* Marshall. VR.

Type came from here and de Nicéville got some from Hamilton. (*Lepita* found in the Naga Hills does not seem to occur here.)

G.4. *Abisara chefa* de N. R.

Swinhoe got many from here.

G.7. *Stiboges nymphidia* But. VR.

Swinhoe says it has been recorded from here.

#### NOTES ON SPECIES MENTIONED IN THE PREVIOUS LIST

B.10.8. *Appias nero galba*

Neuhaus saw one at Dowki in November 1948.

D.2.3. *Mycalesis anaxias*

Now found NR at Laitera and Dowki.

D.2.26. *M. misenus* R.

Swinhoe got some from Cherra. Mr. Sanders took two about mile 40 G.S. Road in March and early April, 1933. In the 2nd ed. of Evans *malsara* is a misprint for *misenus*.

D.2.27. *Mycalesis nicotia* R.

One DSF late March at 2,000 ft. Cherra State. One DSF taken by Sanders in late March at the same place as *misenus*.

D.2.28. *Mycalesis malsara*

Now found NR May, August (new brood) October.

D.2.31. *M. malsarida*

Now found to be common.

D.26.10. *Elymnias patna*

Now found NR.

D.25.12. *Elymnias vasudeva*

Two taken, one at Dowki, October.

E.8. *Amathuxidia amythaon*.

Two taken by Neuhaus at Dowki 1-11-48. We saw another next day. They flew about palms in an orange grove only in the late afternoon.

F.29. *Pseudergolis wedah*

The remark 'Seems rare in Assam' was wrong. It is plentiful in the Naga Hills.

G.3.3. *Dodona eugenes*

One at Dowki October, One from Cherra.

G.3.4. *Dodona egeon*

One at Mawblang below Cherrapunji, October.

G.3.6. *D. adonira*

Emerges late March as I took it then in Cherra.

G.3.7. *D. henrici longicaudata*

Sanders took both sexes in early April 1933 at the place mentioned in the previous list.

LYCAENIDAE

2. *Poritia*

*hewitsoni hewitsoni* M. R.

Male at Umran, mile 42 G.S. Road, 2,700 ft., October. Female taken by Mr. Neuhaus at Dowki, October.

*erycinoides elsiei* Evans R.

I have two from here from the Antram coll. Two from here under the subspecific name of *trishna* Fruh. are in the British Museum. Corbet in *Trans. R. Ent. Soc.* Vol. 90, Pt. 11, 337-50, Sept. 1940, divides races into *phraatica* Hew., Burma-Malaya; *trishna* Fruh., Assam; *elsiei* Evans, Mergui.

5. *Gerydus boisduvalli assamensis* Doh. R.

A pair at Dowki, November.

6. *Allotinus*

*drumila* M. VR.

Mr. D. Sanders took two in March 1933 at Mawblang where the Shillong-Cherra Road ends. Some from here are in the British Museum.

*multistrigatus multistrigatus* de N. R.

Male at Syndai, 1,600 ft., October.

*horsfieldii continentalis* Fruh. Apparently R but so inconspicuous that it may be commoner, as it is VC in Manipur. Taken only at Dowki in June.

7. *Logania massalia* Doh. VR.  
Bingham records it from here.
8. *Spalgis epius epius* Wd. NR. but scarce.  
Plains or low level Sylhet side, October.
9. *Taraka hamada mendesia* Fruh. R.  
Three from Cherra, one in March. One in Shillong, October.
10. *Talicada nyseus khasiana* Swin. NR.  
A number from Cherra, May and October. Not seen elsewhere.
11. *Castalius*  
*rosimon rosimon* F. C.  
Assam Valley side from 2,000 ft. down from April. Another brood June and in September, October. Much scarcer Sylhet side.  
*elna noliteia* Fruh. NR.  
Same places.  
*caleta decidia* Hew. R.  
de Nicéville got from here.  
*ethion ethion* Db. & Hew.  
I failed to find it here though the male is conspicuous and is common in October at Lunding in the Upper Assam forests. But Dr. Norman found it 20 miles from Gauhati eastwards on the Assam Trunk Road, so close to the Khasi Hills border that it must occur within it. (*Roxus roxana*, obtainable in the Upper Assam forests, does not seem to occur here.)
12. *Tarucus ananda* de N. and *Tarucus dharta* BB. R. or VR.  
One or both occur as Swinhoe says he got many *Castalius ananda* from here, which name then covered both species, but I cannot find them in the British Museum. Dr. Norman takes a few of both yearly in the Upper Assam forests, so both may occur in the Khasi Hills. Both are VR in the Naga Hills and Manipur.
13. *Syntarucus plinius* F. R.  
A pair from Cherra. Swinhoe got a few.
15. *Niphanda cymbia cymbia* de N. VR.  
Two from Cherra. Mr. Neuhaus took one in Shillong, August 1949.
16. *Pithecops hylax* F. R.  
A male at Umran, mile 42 G.S. Road, October NR in Upper Assam Forests.

17. *Neopithecops zalmara* But. C.

At low levels. October.

18. *Everes*

*diporides* Chap.

Some males taken on the high plateau may be this, but I have not taken tailless males and am uncertain. I have taken it for certain at Jakhama, Naga Hills.

*dipora* M. C.

At all heights. In Shillong and on high plateau, April-June. A strongly marked brood in August.

*parrhasius assamica* Tyt. R.

One on G.S. Road, October. One from Cherra. One in Shillong in August taken by Neuhaus.

*kala de N.* VR.

The type came from here. Swinhoe got six. Dr. Norman has got some from Jakhama, Naga Hills, 5,400 ft., April, June.

19. *Bothrinia chennellii* de N. R.

It is not rare in Shillong in May, June, August-October. Mr. Neuhaus took it at Burrapani, 9 miles from Shillong at 3,500 ft. I have none from Cherra. It is found in the Naga Hills, e.g. at Jakhama. The anastomosis of veins 11 and 12 must be remembered, but the obvious distinction from a *Lycaenopsis* (*Celastrina*) is the small amount of shifting in of the spot in 6 unF of *Bothrinia*.

20. *Megisba malaya sikkima* M. NR.

Usually from 1,000 ft. down. Mr. Neuhaus took it in Shillong, WSF April, DSF December.

21. *Lycaenopsis*

For change of the generic name to *Celastrina* see Corbet in *Proc. R. Ent. Soc.* (B) 5 Pt. 10 October 1936, all species in Evans being *Celastrina* save *Lycaenopsis haraldus* and *Arletta* (Hemming) *vardhana*.

*puspa gisca* Fruh. C.

Female much scarcer. From April through rains. Both DSF and WSF taken in April. All heights.

*melaena parishii* Rhe Phil.

Neuhaus took in Shillong in July what he believes to be this. Corbet sinks it in *musina musiniodes* in *Trans. R. Ent. Soc.* Vol. 82, Pt. 2, April 1937.

*marginata* de N. NR.

Shillong, May-July, October. Both sexes. Also Cherra.

*transpecta* M. NR.

Wooded areas Assam and Sylhet sides. Shillong from April.

**albocaerulea** M. R.

I took males at Nongsteng, 1,500 ft., 6 miles west and on the plateau 4,000 ft. 2 miles west of Cherrapoonji in early April.

**musina musinoides** Swin. NR but scarce.  
Shillong (July) and Cherra.

**lavendularis placida** de N. NR.  
Shillong and high plateau May, August, September. Also Cherra.

**Cardia dilecta** M. NR.

The first of the genus to appear in Shillong in March and seen till June. Again in early September. Corbet in the above article says *Cardia* Felder is not conspecific with *Dilecta* Moore.

**binghami** Chapman. VR.  
The type came from here. I have none.

**huegelii oreana** Swin. NR but only at 5,500 ft. and over.  
Laitlyngkot in May and 12 miles along Shillong-Mawphlang Road on thorn bushes early March and September. Dr. Norman has published in Vol. 49 (3) an account of the larvae found there.

**argiolus sikkima** M. NR.

Shillong and Cherra. Examination of androconia is needed to distinguish from *jynteana*. May, June and autumn.

**jynteana** de N. NR.

In Shillong from May like *sikkima*. The very pale blue form called *victoria* by Swinhoe is occasionally found in Shillong and Cherra.

Note. For genitalia of various species see Chapman in *Proc. Zool. Soc. London*. August 1909. Females are notoriously difficult.

23. **Chilades laius laius** Cr. NR.

Low levels, April, June, October.

24. **Zizeeria**

**maha maha** Koll. VC.  
All levels and most months.

**lysimon** Hub. Probably R.

Thinking it did not occur here I did not search, but I got one in May 1949 at Nichuguard, Naga Hills, where Tytler lists it as VR. I told Neuhaus who then took one in Shillong in July. I find Swinhoe got some from Cherra calling it *karsandra*.

**gaika** Trimen. NR but scarce.  
I have taken it on the plateau at Cherra at 4,000 ft. and lower.

**otis otis** F. C.  
Mostly at low levels. Abounds at Citrus Station G.S. Road.

25. **Euchrysops**

**cnejus** F. R.

Two only. Swinhoe got many but it seems rare as I looked for it specially.

**pandava pandava** Hors. R.

One male at Dowki, October.

26. **Lycaenesthes**

**emolus emolus** God. VC.

Sylhet side April-June, August, September, October. Not numerous on Assam side. Plains to 2,000 ft.

**lycaenina lycambes** Hew. NR.

Flies with *emolus*, but much scarcer.

27. **Catachrysops**

**strabo** F. C.

From plains to Shillong. April to October.

**lithargyria** M. NR.

Scarcer than *strabo* but plentiful in some places. Abundant in Upper Assam forests in May.

28. **Lampides boeticus** L. VC.

Plains to Shillong. March to November.

29. **Jamides**

**bochus bochus** Cr. NR.

In woods on Assam Valley and Sylhet sides. Usually from 2,000 ft. downwards but also in Shillong, April, June, September, October.

**cleodus pura** M. C.

On Sylhet side and occasionally on the high plateau. I have never seen it on the Assam Valley side. Both WSF and DSF fly together at Dowki at the end of October. In November the WSF disappears.

**celeno celeno** M. NR.

A few taken on the Assam Valley side of the Khasi Hills and in the plains, but it is not abundant in Assam. I have not seen it on the Sylhet side where *pura* is plentiful. They fly together in Upper Assam. Riley and Corbet in *Trans. R. Ent. Soc.* Vol. 87, Pt. 5, 147-159 of 15-6-38 deal with species of *Jamides* from S.E. Asia, not India. They say that *celeno* female has the pale areas of upperside more dingy and of a more greyish hue than female *pura*, which has them of a clear though pale blue; the border of *pura* is a deep black, that of *celeno* is paler and browner. In the Khasi Hills, however, the rains form of *pura* female is sometimes very fuscous being as dark as any *celeno*. The article has many new points about nomenclature and genitalia, e.g. *pura pura* Moore and *cleodus* Felder (Philippines) have similar facies but quite different genitalia.

**kankena pseudelpis** But. NR.

April, May, September, October.

**alecto euryasces** Fruh. NR.

Both it and *kankena* are forest dwellers and so at lower levels here. Both are rather scarce. Females are distinguishable in the DSF, as Dr. Norman has pointed out to me, by DSF *alecto* having the ground below very pale tawny brown and DSF *kankena* having it grey-brown to grey.

**coerulea** Druce. R.

Some from here are in the British Museum. I have it only from the Naga Hills.

### 32. *Nacaduba*

**pactolus continentalis** Fruh. NR.

From March and in autumn at Cherra.

**hermus nabo** Fruh. R.

Four males from Cherra. See note on *lysa intricata*.

**lysa intricata** Corbet. R.

The new name for the *vajuva* in Evans. Some from the Khasi Hills are in the British Museum. I have some sent by Dr. Norman from the Upper Assam forests. To distinguish from males of *hermus nabo* by the androconia test, one of each species known as such by colour should be examined at the same time, when the difference will be discernible. Dissections show *hermus nabo* has the clasp figured as No. 11 *nabo swatipa*, in Corbet's article in *Trans. R. Ent. Soc.* Vol. 87, Pt. 5, pp. 125-164 of 15-6-38. In *Proc. R. Ent. Soc. B.*, Vol. 17, Pts. 7-8 of 16-8-48 Corbet changed his nomenclature and key. Dr. Norman's specimens when dissected are pronounced by Mr. Bennett of the British Museum to be true *lysa*. The clasps resemble Corbet's figure 7 of 1948. His figure No. 10 of 1938, *intricata* should be neglected. Corbet in the 1948 Key says that *hermus nabo* has the white stripes unH in spaces 4 and 5 straight and conjoined, while *lysa* has them comma-like and not in line. Taking specimens from Assam, I cannot find this applicable. At most there is a tendency for the stripes in *hermus nabo* to be more conjoined. Individuals vary especially those of *lysa intricata*. Dr. Norman has sent some of his series to prove it. Corbet says the female of *hermus nabo* is lustrous purple blue and of *lysa* is shining sky blue with the discal area slightly whitened. I have failed to recognise this distinction in the series of females of *hermus nabo* and *lysa* of various races in the British Museum drawers. This is unfortunate in view of the failure of the rule about stripes. Dr. Norman has sent me a female taken in coitus with an undoubted male *lysa intricata*. Her stripes are neither more nor less conjoined than those of a male *hermus* sent by him.

**helicon merguiana** M. (*viola* of the 1st ed.). NR.

Plains to 2,000 ft. April-June, September, October. Often on damp spots on roads.

**kurava euplea** Fruh. NR.

Sylhet and Assam sides. Also Shillong. All months from April to October.

**beroe gythion** Fruh. NR.

As for *kurava*.

**aluta coelestis** de N. R.

A few produced yearly from Cherra. I have seen only two females. Male NR in Upper Assam forests.

**nora nora** Fd. VC.

Plains to Shillong. Early April to June, September, October. It likes damp spots on roads.

**dubiosa sivoka** Evans. C. Ditto.

**dana** de N. NR but scarce.

Dr. Norman says it stays inside the forest.

### 35. *Heliophorus*

For the whole genus see an article by Riley in *Jour. Bom. N.H.S.* February 15th, 1929. It is very thorough with a full key and figures of genitalia.

**epicles indicus** Fruh. C.

Mostly from plains to 2,000 ft. but a few on the high plateau. From April through rains, a few even in August.

**androcles androcles** Hew. R.

One or two have been taken every month by Neuhaus or myself from March to October in Shillong or on the high plateau around. Females are rarer.

### 38. *Callophrys leechii* de N. VR.

The female was first described from here. Then Swinhoe got a male from here.

### 41. *Thecla khasia* de N. VR.

de Nicéville got one from Hamilton. Neuhaus took a female at Mawphlong 6,000 ft. 17 miles from Shillong in September 1949. Tytler got it in the Naga Hills.

### 44. *Curetis*

**saronis gloriosa** M. NR but scarce.

At plains level below Cherra and at Dowki. I have taken it at Nowgong Town in Central Assam.

**bulis** Db. & Hew. C.

Mostly at low levels.

**acuta dentata** M. NR. Ditto

### 45. *Iraota timoleon timoleon* Stoll. Male NR, female R. From Cherra.

48. *Mahathala ameria* M. R.

Three at Burnihat G.S. Road. May.

49. *Amblypodia (Arhopala)*

All are from Cherra State unless other places are mentioned. Rarity is uncertain as any species is hard to obtain. If residence be near the collecting area, Dr. Norman has shown what is possible in the way of rare species in the Upper Assam forests.

*opalina* M.

The type in the British Museum is unique in Assam, but Corbet in *Proc. R. Ent. Soc. (B)* Vol. 10, Pt. 9, pp. 149-184, September 1941 says it probably came from Siam, not from the Khasi Hills.

5. *camdeo camdeo* M. VR.

A tattered female taken in April at Nongpoh, 1,700 ft. G.S. Road. Swinhoe got two females. The conspicuous male would be taken often if not VR. It flies in August as Dr. Norman took some then.

*silhetensis* Hew. VR.

Only one male from here. Swinhoe got one.

*yendava* Gr. S. VR.

In Evans 2nd ed. *adoreia* de N. is given as a synonym, not *agnis*. de Nicéville got *adoreia* from here, figuring it. I have one from Cherra from the Antram coll. Corbet in the article cited about *opalina* gives *adoreia* as a race of *silhetensis* and puts *yendava* and *agnis* as races of *aedias*.

*oenea* Hew. R.

de Nicéville says Hamilton got it in profusion, but I have only three males and one female.

*khamti* Doh. R.

One female. Corbet calls it a synonym of *oenea*.

*centaurus pirithous* M. NR.

The species most often seen. May, June, August, October. Also on Assam Valley side at Burnihat.

*eumolphus eumolphus* C. NR.

Taken also at Burnihat.

*eumolphus hellenore* Doh. R.

One from Cherra.

*bazaloides* Hew. R.

One only, but Swinhoe got many from here.

*paramuta* de N. R.

Five males.

*perimuta perimuta* de N. NR.

Also at Burnihat, May, October.

**paraganesa zephyretta** Doh. VR.

Hamilton sent one from here to de Nicéville. Some males in the British Museum have only sparse scattered blue scales upF. Dr. Norman has sent a number of males taken in the Upper Assam forests with blue over the whole cell or the lower half of the cell, thence from cell to tornus and the base of space 2 and either with a few scales at the base of 3 or covering the base of 3 with a few scales at the base of 4.

**ammonides elira** Corbet.

The new name of Corbet for Khasi Hills specimens having in space 7 unH a conspicuous white patch separating the central and postdiscal spots, instead of the name *ammon ariel* Doh. in Evans, *vide* Corbet's article cited about *opalina* above. To the form without this white patch taken by Doherty in Upper Assam, Corbet gives the specific name *ariel ariel* Doh. *Elira* male has the blue on upF darker and more extensive than male *zephyretta* as it covers the cell and bases of all spaces save 12. *Elira* female has the blue restricted much as male *zephyretta*. Below it has the chocolate ground darker and spots unH are edged with fine white lines and the ground is not mostly covered with the white scaling seen on *zephyretta*. But two labelled as *zephyretta* males in the British Museum lack white scaling unH. Corbet said that more material might cause surprises in the *ammonides* and *ariel* group. This is now available in the series taken by Dr. Norman in the Upper Assam forests in which he shows that the white colour on the patch in 7 gradually fades into nothing. This last may or may not be *ariel*.

**abseus indicus** Riley. R.

Swinhoe received it from here.

**diardi** Hew. R.

Six males and a female. Also Mr. Neuhaus got a pair in the low hills between Cherra and Dowki in September.

**fulgida** Hew. R.

Four males and two females.

**anniella artegal** Doh.

Mr. Neuhaus took in October at Dowki a male with markings similar to those of my single specimen from Burma. This seems the first record of it from the Khasi Hills. Tytler says it is VR in Manipur.

**asoka** de N. R.

One only. Two from here are in the British Museum.

**chinensis** Fd. NR but scarce.

I have taken it from the end of September.

**areste areste** Hew.

Same note as for *chinensis*. Corbet thinks it is probably conspecific with *chinensis*.

50. **Surendra**

**quercetorum quercetorum** M. C.

Up to 1,200 ft. through the rains and occasionally till January.

**todara distorta** de N. R.

Swinhoe received some from here. My servant when we were at Nichuguard, Naga Hills, in May failed to follow instructions to avoid the common *quercetorum* and so took my only *distorta*.

51. **Mota massyla** Hew. R.

Three from Cherra.

53. **Loxura atymnus continentalis** Fruh. NR.

At plains level Sylhet and Assam Valley sides.

54. **Yasoda tripunctata** Hew. R.

After long search I took one at Dowki in new condition in July. Swinhoe got one from here.

57. **Spindasis****syama peguanus** M. NR but scarce.

At low levels May and October.

**lohita himalayanus** M. NR.

Much commoner than *syama*.

59. **Pratapa**

All from Cherra unless otherwise mentioned.

**vidura pennicilligera** de N. R.

Eleven males and 3 females. I have taken it at 2,000 ft. in late September.

**cotys** Hew. VR.

One male.

**ctesia** Hew. R.

Eight males.

**deva lila** M. NR.

Also between Cherra and Dowki in September.

**icetas extensa** Evans VR.

Two males Shillong late March. Swinhoe got males from Cherra.

**icetoides carmentalis** de N. NR but scarce.

28 males and females.

**cleobis** God. NR.

Both on Sylhet and Assam Valley sides. I have taken it at plains level in early April on mango flower.

60. **Tajuria**

All from Cherra but *jangala ravata* also at Dowki.

**jangala ravata** M. NR.

April and October. All are chocolate below save one bright ochreous taken late October.

**megistia megistia** Hew. R.

Seven males and 2 females.

**yajna istroidea** de N. VR.

Two males from here from the Antram coll., another from Cherra.

**melastigma** de N. VR.

de Nicéville received one from here and another from here is in the British Museum.

**ister** Hew. VR.

Two males. Swinhoe got some of both sexes from here. I could identify mine only by comparing its colour with those in the British Museum.

**buto** de N. R. Female VR.

Two males and one female. Brigadier Evans used to receive some occasionally from Cherra.

**culta** de N. VR.

Hamilton sent 5 males and a female from here to de Nicéville.

**diaeus** Hew. VR.

de Nicéville got a male and Swinhoe 2 males from here.

**thya** de N. VR.

Three males. Two from here in the British Museum.

**cippus cippus** F. R or VR.

One male. de Nicéville did not get from Hamilton and Swinhoe got only one for his list of 1893. It looks like *Pratapa deva lila* below but is grey instead of white. It of course lacks the male sex marks of a *Pratapa*.

**illurgis** Hew. R.

Two only. Some from here in the British Museum.

**illurgoides** de N. VR.

Some from here in the British Museum.

**luculentus nela** Swin. VR.

A male from here from the Antram coll. Swinhoe described the male from here (Jaintia Hills) and also a female, but Corbet says this female is a form of *Pratapa deva*.

**maculata** Hew. R.

Several are produced from Cherra yearly.

## 61. Charana

**jalindra indra** M. Males NR, females R.

March and September in Cherra. One in Shillong in May.

**mandarinus** Hew. R.

One in Shillong late March and one in June. About half a dozen a year from Cherra.

67. **Suasa lisides** Hew.            VR.  
Two from Cherra.
68. **Cheritrella truncipennis** de N.            VR.  
Described from a specimen sent from here by Hamilton. One from here in the British Museum. Mr. Perry took a female on the high Barail Range in N. Cachar. My only specimens are from the Naga Hills.
70. **Cheritra freja freja** F.            C.  
On both Sylhet and Assam Valley sides at low levels. April and October.
71. **Ticherra acte** M.            NR. Same places as *Cheritra*.
77. **Horaga**  
**onyx onyx** M.            R.  
Only three, of which one was taken in Shillong in May. Mr. Perry reports NR in N. Cachar Hills, May-June.  
**moulmeina** M.            VR.  
One male from Cherra. Swinhoe got some from here.
78. **Catapoecilma elegans major** Fruh.            NR but scarce.  
From early March and November. One at Dowki, 32 males and 4 females from Cherra.
79. **Chliaria**  
**othona** Hew.            NR but scarce.  
One at Nongpoh in June. A few from Cherra.  
**kina cachara** M.            VR.  
de Nicéville got one and Swinhoe four from here. I have taken it at Jakhama, Naga Hills, 5,400 ft. in May.
80. **Hypolycaena erylus himavantus** Fruh.            VC.  
At plains level and to 2,000 ft. Sylhet side, April-May, September-October.
81. **Zeltus etolus** F.            NR.  
Plains and low levels. May, July, October.
82. **Artipe eryx** L.            VR.  
One female from Cherra.
83. **Deudoryx**  
**epijarbas amatius** Fruh.            NR but rather scarce.  
Shillong in May, June, October. Also from Cherra. Females seen as often as males.

**hypergyria gaetulia** de N. R.

Three males from Cherra in October. Mr. Neuhaus took a female at Dowki in October.

84. **Virachola perse perse** Hew. VR.

One female on G.S. Road at 2,500 ft. 16 miles from Shillong in October 1948. Swinhoe got some from Cherra. Being so conspicuous more would be taken if not VR.

85. **Rapala**

All taken in Cherra State or at Dowki. *Nissa* also in Shillong.

**refulgens** de N. R.

Swinhoe got several from here. Mine are from Sikkim.

**suffusa suffusa** de N.

Three males and 2 females. Hamilton got only 3 for de Nicéville.

**tara** de N. NR.

Produced in quantity from Cherra. I took males in October at Laitera on a palm which they visited every evening. In flight they are so swift as to be seen only with difficulty.

**sphinx sphinx** F. R possibly VR.

One male at Dowki in November. de Nicéville got the first taken in India from Hamilton. Swinhoe got many of both sexes from here.

**varuna orseis** Hew. NR but scarce.

All WSF are very dark below with a purple wash. DSF taken in January is pale buff below.

**schistacea** M. NR.

Many produced in October 1949. WSF has a purple wash below.

**scintilla** de N. R.

Mr. Neuhaus took a male at Dowki in October. Swinhoe got both sexes. I have some from here in the Antram coll.

**pheretimus petosiris** Hew. NR.

One or two can be seen at Dowki in course of a day. April-June and October-November.

**dieneces dienece** Hew. R.

One male. Swinhoe got a few of both sexes from here.

**jarbas** F. R.

Only one pair from Cherra. Swinhoe got a few. Mr. Perry took some in the neighbouring North Cachar Hills. NR in Upper Assam forests. Corbet in *Proc. R. Ent. Soc. (B)* Vol. 8, Pt. 6, June 1939 says it is conspecific with *melampus*.

**buxaria** de N. VR.

One male. Swinhoe got some from here. In the British Museum collection it is now sunk as a synonym of *nissa*. It is dull dark blue until seen aslant when a small central area upperfore and a large area upperhind suddenly glow brilliantly.

**nissa redivitta** M. C.

In Shillong from mid-March through rains. Many from Cherra. Occasionally yellowish grey below but usually at all seasons with a rosy purple flush below varying from faint to deep.

**rosacea** de N. VR.

Corbet in the article mentioned above concerning *jarbas* says that the male clasps of *rosacea* are broader and more deeply cleft than those of *nissa* and hence that they are different species. He figures the genitalia. I have seen the slide in the British Museum where there are two *rosacea* from the Khasia Hills. Typical *rosacea* is red below, not in any way purple, and thus easily known. The tornal spots below are dark red while in *nissa* they are black.

86. **Sinthusa****chandrana grotei** M. R.

Two males one female. Shillong, July and Dowki, November.

**nasaka amba** Kirby VR.

One male from Cherra from the Antram coll. Two from here are in the British Museum.

87. **Bindahara phocides phocides** F. VR.

Two from Cherra. de Nicéville got one and Swinhoe one from here.